

## **MSRR CONOPS**



## **DRTWG MEETING**

1 August 1995

Iris Kameny/RAND

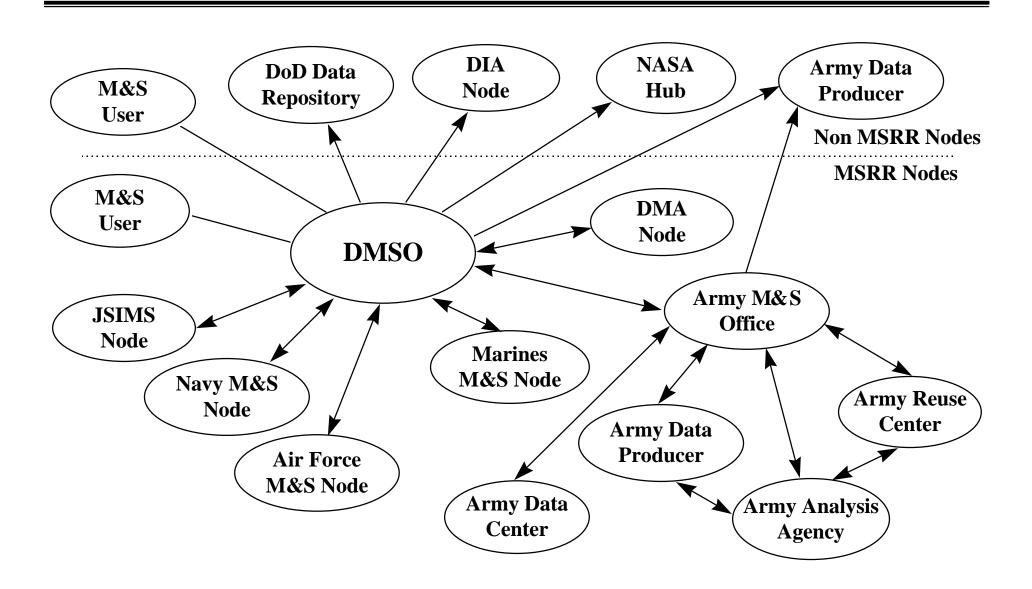


- General (Introduction, Purpose, Scope, Objectives)
- Organization
  - Resources, Functionalities, & Capabilities
  - Architectural Framework of Standards and Conventions
  - Management
- Roles of Organizations / Components
  - DMSO and the MSRR Coordinating Council
  - Information Domain Coordinators (IDC), Node Administrator, Users
- System Operational View (user/provider views based on intended use)
- Internet WWW Issues & Problems to be Considered
- MSRR Issues



- MSRR: distributed client-server network of M&S information resources easily located and accessed by M&S users, governed by M&S policies and procedures, in compliance with MSRR architectural framework of standards and conventions
  - Will be subset of future DoD Repository
  - MSRR Users include: operators, study and exercise directors, trainers, analysts, test and evaluation designers, logistics analysts, model and simulation developers
  - MSRR resources include: metadata, M&S Community Directories, instance databases, models, simulation, algorithms, tools, and documents
  - Evolution: from Interim MSRR (iMSRR) experimental testbed to full-up MSRR
  - iMSRR leverages off internet WWW client-server protocol, hypermedia links, COTS and GOTS tools, other WWW technology
  - Plan is to have separate unclassified and classified MSRR systems







- Data administration tools
- M&S Community Directories tools
- Instance database (located at data centers, data warehouses, etc.) tools
- M&S VV&A and Data VV&C tools
- M&S and M&S objects and algorithms
- Configuration management and variant control tools
- MSRR client and server application suite
- Document handling tools

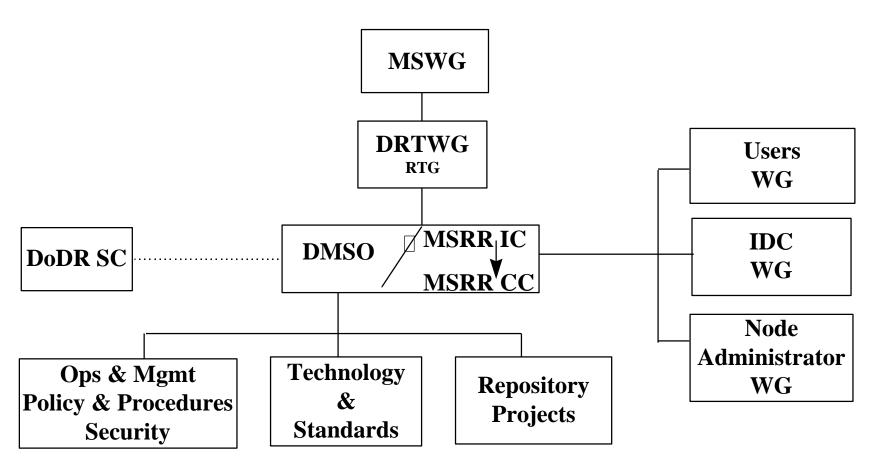


- DISA/TAFIM compliant in order to interoperate with operational community
  - Software: OS, human computer interface, Internet transport and processing protocols, data exchange standards
  - Communications: DISN (Internet)
  - Hardware: TBD
  - Security and Privacy: authentication, access control, releasability
  - WWW standards and conventions: style guide, home page standard, client-server application suite, recommended WWW tools



- Overall responsibility, authority, and funding control for MSRR with consensus from MSRR Coordinating Council (CC)
  - Minimize management to support decentralized control
- Permanent Staff working through MSRR CC to:
  - Fulfill Registrar obligations, chair MSRR CC, present MSRR plans/needs to M&S Working Group, participate in MSRR WGs,
  - Develop, document, implement, and enforce MSRR policies and procedures, and compliance with architectural framework standards and conventions
  - Fund and oversee R&D projects and task forces necessary to address MSRR needs as recommended by the MSRR CC
  - Negotiate and control releases and licenses for COTS and GOTS
  - Maintain: Welcome Page, MSRR system documentation and standards





**DoDR SC** = **DoD Repository Steering Committee** 

DRTWG = Data & Repositories Technology Working Group

RTG = Repositories Task Group

MSRR IC = MSRR Implementing Committee
MSRR CC = MSRR Coordinating Council
IDC = Information Domain Coordinator



- First meeting scheduled 8 August at DMSO
- Three types of members: voting, observing, invited
- Suggested members:
  - Voting Army, Navy, Marines, Air Force, J-Staff, Intel, DMA,
     C3I
  - Observing JSIMS, DIS, JWARS
  - Chair DMSO
- IC TOR: Consensus forming group on all MSRR actions to be carried out by DMSO
- Initial tasks concur on:
  - 1. TOR for MSRR CC
  - 2. MSRR policies and procedures
  - 3. MSRR architectural framework
  - 4. MSRR working group organization
  - 5. TORs for all MSRR working groups
  - 6. Information Domains





- Chaired by DMSO
- Acts as consensus forming group to DMSO (similar to role of MSWG to EXCIMS)
- Consists of representatives nominated by Components/others having M&S offices and approved by MSWG
- Addresses issues and recommendations received from MSRR WGs (Node Administrators, IDCs and Users)
- Addresses all MSRR areas including: policy and procedures, architectural framework standards and conventions, infrastructure support, R&D needs, designation of Information Domains



- Node Administrators responsible for administration and maintenance of HW/SW on his/her MSRR node
  - Carries out MSRR policies and conventions
  - Complies with architectural framework of standards and conventions
  - Manages user access and authentication
- Node Administrator WG
  - Composed of all MSRR Node Administrators
  - Addresses exchange of information and management of MSRR nodes
  - Develops consensus on MSRR infrastructure and architectural framework standards and conventions
  - Acts as a forum for exchange of WWW knowledge and technology
  - Represents MSRR needs at WWW standards meetings
  - Presents issues and recommendations to MSRR CC for approval
  - Initially chaired by Node Administrator of DMSO MSRR node



## • IDC responsibilities

- Responsible for overall organizational structure of his/her Information Domain and related IDCs
- Interfaces with Registrar on IDC and Information Domain registrations for relevant subdomains, sub-subdomains, etc.
- Authority over how domain information is organized, maintained and presented in accord with Node Administrators guidance
- Administers Domain Home Page
- IDC WG's responsibilities
  - Composed of all IDCs
  - Addresses and develops consensus on organization of Information Domains
  - Addresses and develops consensus on data/information/knowledge problems, issues, needs of M&S community such as filling in data voids
  - Presents issues and recommendations to MSRR CC for approval
  - Initially chaired by DMSO member



- Members consist of users across DoD community
- Activities
  - Discuss issues and problems and concur on solutions
  - Share lessons learned
  - Make recommendations to the MSRR CC
- Initially chaired by member of DMSO





- Must be approved by signing MOU/MOA with DMSO and being registered with the Registrar
  - Approval based on agreement of MSRR CC and DMSO that node hosts information resources useful to DoD M&S community and is MSRR compliant
  - MOA/MOU asserts that node HW/SW is in compliance with MSRR architectural framework standards and conventions and node Node Administrator and node users will comply with MSRR policies and procedures
  - Node Administrators
     Administrator WG
- Under the iMSRR plan, DMSO is sponsoring iMSRR nodes for each Service and for the JSIMS program



- Develop procedures, templates, and tools for supporting registration activities
- Maintain MSRR Registry databases for
  - MSRR server nodes
  - MSRR users
  - Information Domain Coordinators (IDCs) for Information Domains
  - Information Domains
  - MSRR WGs membership, mailing lists, and agendas





- Defined as "a logical grouping of related information into a distinct domain of interest"
- Based on a (yet to be determined) taxonomy of information domains to break information management and accountability into manageable chunks
- High level information domains will have their own home pages
- The IDC is responsible for structuring his/her information domain into subdomains down to an appropriate level and assigning IDCs to manage these
- After information domain/subdomains have been approved and registered, links will be established between their home pages and others



- 1. Registered user searching for data accesses DMSO MSRR node
  - 2.A. EITHER: searches Authoritative Data Sources Directory
    - **2.A.1.** Selects authoritative data source (ADS)
    - 2.A.2. Links to ADS IDC for information about appropriate database identifiers
    - 2.A.3.A. EITHER: accesses DMSO MSRR node for Database Directory to find out more information about databases by identifiers, selects database and accesses selected database MSRR node for browsing, etc. and retrieves data directly or through electronic ordering
    - 2.A.3.B. OR selects database and links directly to database MSRR node to browse, etc. and retrieves data directly or through electronic ordering
  - 2.B. OR searches Information Domains for appropriate domain/IDC home page to link to in order to work way down tree of subdomains through home pages until find well defined data topic and IDC (ADS) and then
    - **2.B.1. EITHER goes to 2.A.2.**
    - 2.B.2. OR if IDC identifies and links to specific database of interest, then
    - 2.B.2.A. EITHER goes to 2.A.3.A.
    - 2.B.2.B. OR goes to 2.A.3.B.





- WWW very new, immature, with many issues
- Current lack of organization in use of internet by M&S Community
- Few standards and poor consistency: use of many conflicting formats
- Little quality control: many WWW pages poorly written, lacks metadata
- No maintenance plan for resources: information is dated and can get quickly out of date, lacks metadata, quality control and configuration management
- Plagiarism: easy to plagiarize electronically
- Overlap and redundancy: because lacking central plan or responsibility
- No official POCs: lack of POCs and clear definition of their scope and responsibilities
- No configuration management among WWW tools: high rate of change resulting in incompatibilities and user difficulties



- Assignment of roles and responsibilities
- Taxonomy of Information Domains
- Configuration Management of MSRR resources within each node: Strawman being developed
- Classified MSRR
- Operating the MSRR on a business basis (Industrial Funding)
- Addressing data voids, and data fill
- Resource reuse and releasability
- Data and repository needs of major DoD M&S programs [e.g. JWARS, Synthetic Theater of War (STOW), High Level Architecture (HLA)]
- Security: access, authentication, resource releasability, labeling, etc.